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ABSTRACT

The Research About Teacher Education (RATE) project is an ongoing data collection effort to establish a reliable data base about teacher education. Thirty schools were randomly selected from institutions offering bachelor's, master's, and doctoral degrees for a total of 90 institutions. Following a long-term plan for rotating targeted respondents, professors of foundation courses and their students were surveyed. Participants in the survey included 153 professors and 729 students. Five sections elaborate on the data collected. Section one presents the context for teacher education by examining data which describe the entire institution and its education unit. The second section describes the status of current reforms in teacher education as reported by the participating institutions. The anatomy of a program with a focus on foundations is the subject of the third section. Section four studies the education professoriate and section five, student profiles. A summary of highlights points out some encouraging findings as well as some concerns that need to be addressed. Data are displayed in tables with narrative analysis. (JD)

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American Association of Colleges for Teacher Education

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Teaching Teachers: *Facts & Figures*

Research About Teacher Education Project

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ACKNOWLEDGMENTS

This second RATE report is the product of an ongoing collective effort. As this document reaches publication, data from the third year of data collection are being analyzed and revisions are being made in instrumentation and sampling for the fourth year of the study. Because more than a year of careful development, piloting, and drafting items preceded the first year of data collection, we are now entering the fifth year of collaborative effort. Five individuals warrant special recognition for their contributions from the conception of the project to their continuing involvement on the RATE committee at this time: Edward Ducharme (University of Vermont), Gary Galluzzo (Western Kentucky University), Ken Howey, (Ohio State University), Sam Yarger (University of Wisconsin-Milwaukee), and Nancy Zimpher (Ohio State University). Sam Yarger was the first chair of the committee, and his institution provided generous support to the project during his tenure. He continues in an active role as an *ex officio* member of the committee. Gary Galluzzo and his institution have now assumed a major responsibility for data collection and analysis. Ken Howey serves in a major coordinating role as the current chair of the committee. Richard Arends (University of Maryland) joined the committee early on. Antoine Garibaldi (Xavier University, Louisiana) and Mary Kluender (University of Nebraska) have made substantial contributions as new members of the committee.

AACTE staff also continue to contribute in major ways. Mary Dilworth is the staff liaison to the project and has provided leadership in numerous ways. Sharon Givens and Janice Lynch deserve credit for splendid assistance in editing the report. David Imig continues to support the project and promote its efforts in a variety of forums.

Suzanne Yessayan at Ohio State University and Dick Arends, Suzzane Currie, and James Donnelly at the University of Maryland also provided many hours of assistance in preparing the report, especially the graphics, for final production. Ultimately, however, the project calls for the assistance of institutional researchers collaborating with the project in a major way. This round of data collection involved 77 persons across a variety of institutions in both collecting often difficult-to-obtain institutional data and in assisting in the collection of survey data from faculty and students. Without their unselfish contributions there would be no project.

FOREWORD

AACTE's second report on Research About Teacher Education (RATE), *Teaching Teachers: Facts and Figures, 1988* or *RATE II*, clearly documents that our members have seized the opportunity to reform their teacher education programs. The second report in this ongoing series focuses on education foundations courses, faculty, and students, and presents general institutional data.

As a result of the extraordinary commitment and effort of AACTE's Committee on Research and Information, we are provided with an excellent overview of the current status of our profession. It shows where improvements are needed and where improvements have been made.

I am pleased, for example, to see the number of reform efforts that have occurred within our membership. *RATE II* found that 51 percent of our member institutions have begun to use teachers as teacher educators. The collaboration of colleges and schools is imperative if we want to effectively prepare professional educators for our nation's schools.

The finding that 52 percent of AACTE members have revised their curricula is also encouraging. Changes and members' efforts to further the knowledge base in professional education are necessary to deliver quality education.

Another piece of good news is that enrollment in teacher education programs increased by slightly over 20 percent. Although this increase is significant, we must not overlook that the number of minority teacher education students has not increased. In fact, the low number of students from minority groups (4.3 percent Blacks, 2.5 percent Asians, and 1.5 percent Hispanics) is a serious problem, which needs to be addressed by all schools, colleges, and departments of education.

Teaching Teachers: Facts and Figures, 1988 is a fine example of excellent research, which will continue to assist us in monitoring changes in our institutions and keep us abreast of developments in the teaching profession.

I commend AACTE's Committee on Research and Information on this second report. It provides comprehensive, accurate, and much-needed baseline data.

Eugene E. Eubanks
AACTE President

November 1988

INTRODUCTION AND METHODOLOGY

True or False?

- Teacher education students are not especially positive about teaching as a career. Most indicate that they only plan to teach for a few years.
- Teacher education professors have little experience teaching children and spend practically no time in schools.
- Teacher education courses are less rigorous than other courses.
- Administrators of teacher education programs are reluctant to raise admission and exit standards.

Chances are, if you followed reports in the popular press, you would label the above assertions true, but you would be wrong. Data gathered in the first two years of the Research About Teacher Education (RATE) study contradict these assertions. This is not to say that teacher education is without problems; however, we need more and better data about teacher education programs--and the professors and students within them--to understand more precisely where changes are needed. Thus, a major purpose of this ongoing study is to provide accurate data to those concerned with the education of teachers.

The RATE Project illuminates negative and positive aspects of teacher preparation. Although we do not wish to ignore those problems which need to be addressed, we want to counter inaccurate--and often negative--assertions about the quality of teacher education when these do exist.

To this end the Committee on Research and Information of the American Association of Colleges for Teacher Education (AACTE) initiated the RATE Project four years ago. The project is devoted to collecting information about institutions of

higher education engaged in teacher education, and about their teacher education programs, faculty, and students.

From its conception, the RATE Project has been envisioned as an ongoing data collection effort to establish a reliable data base about teacher education. As data accumulate each year, a foundation for analyzing trends such as enrollment patterns, faculty composition, and student interests will be laid. With national attention focused on teacher education, the RATE Project should prove useful in documenting the success of reforms and in stimulating improvements.

RATE data were culled from analyses of three instruments--institutional, faculty, and student. Archival data from institutions covered the 1986 calendar year. Self-reported perceptual and factual survey data from faculty and students, however, were collected in Spring 1987. Those administering the survey instruments were trained research representatives from each participating institution. (See Appendix A for a list of participating institutions.)

The institutions were selected from a stratified random sample of the 713 member institutions of the 1985 AACTE membership list. The institutions were stratified according to the degrees offered by the school, college, or department of education.

- •Stratum One — Bachelors: representing the 232 AACTE institutions that offer the baccalaureate degree programs in education
- •Stratum Two — Masters: representing the 318 AACTE institutions that offer baccalaureate, master's, and six-year degree programs in education
- •Stratum Three — Doctoral : representing the 163 AACTE institutions that offer baccalaureate, master's, six-year, and doctoral degree programs in education

Return and Expected Error Rates

Thirty institutions were randomly selected from each stratum for a total of 90 institutions. The return rates for the second year of data collection, RATE II, were close to the 84 percent rate obtained the first year: Seventy-seven institutions returned complete data sets for a participation rate of 85.5 percent. At the 95 percent confidence level, the error estimate for this participation rate ranges from one-fifth to one-third of a standard deviation, or between 2 and 10 percent for proportional data. There was some variability within stratum, with Stratum One providing fewer complete data sets and Stratum Three providing more than the other two strata.

The confidence levels for data by institutional type and stratum are provided in Appendix B. For the most part, these are similar to those obtained during the first year of data collection. Because fewer professors and students responded to their respective questionnaires, the error rates at the 95 percent confidence level are slightly higher this year than last.

While the number of student respondents (N=729) was slightly less this year than last, that difference is not viewed as important. There were, however, 28.8 percent fewer professor (N=153) respondents this year than last. This decrease is attributed to the directions provided the research representatives on each campus. The research representatives were instructed to solicit cooperation from a maximum of four foundations professors. To avoid confusion, a specific definition was provided for "foundations courses." During the data collection, researchers found that some institutions had fewer than four professors teaching the foundations courses, thus accounting for fewer respondents to this year's professor questionnaire.

Questions for faculty and students were developed with a concern for eliciting information that could be useful in improving teacher education programs. The two groups supplied demographic information, as well as information such as age, sex, race/ethnicity, and salary. Subjective opinions were sought on questions about program quality, course rigor, and future plans. On several occasions faculty members and students responded to the same item in order that their opinions could be compared.

The institutional survey solicited data characterizing the institutions and their teacher education programs, faculty, and students. Questions sought information about enrollment, institutional size, mission and structure. Specific questions about teacher education surveyed the number and types of programs and their enrollment size; level of accreditation and state approval, or both; and, faculty and student profiles as they relate to program type; program requirements for admission and exit; and faculty salaries and tenure.

The data collected in RATE I focused on secondary methods courses, the faculty who taught them, and their students. AACTE published the results in a 1987 document entitled: *Teaching Teachers: Facts and Figures*. The RATE II data, collected in 1987, reflects a different focus--foundations courses. The institutional questionnaire is considerably shorter than it was during the first round of data collection. This reflects a decision by the Committee on Research and Information that certain data need only be collected on a three-to-five-year cycle. For example, faculty, some aspects of demographics, and institutional characteristics such as accreditations do not change annually.

This year, following the long-term plan for rotating targeted respondents, professors of foundations courses and their students were surveyed. This design should permit comparisons not only of professors and students representing different disciplines, but also of their perceptions of a number of critical factors, such as program quality. During the third year of data collection, professors of elementary education courses and elementary student teachers have been asked to respond to the questionnaires.

Instrument Alteration and Data Entry

In an effort to maintain questionnaires of reasonable length for student and faculty respondents (questionnaires that required 25 to 30 minutes to complete), a

number of items were removed so that new items could be added. Other items previously used to solicit information from secondary professors and students were altered slightly, if at all, to obtain comparable information from foundations professors and students. However, the shift in focus required that additional areas be studied. In the end, this year's questionnaires required three to five minutes more respondent time than last year's.

All other aspects of the study, including the development of the *Research Representative Manual* and training session, and the delivery, retrieval and data analysis procedures, remain constant. This year's work is consistent with the Research and Information Committee's plan to establish an ongoing data collection system that will provide a dynamic data base for AACTE and its membership.

The data presented in this report are descriptive in nature and are reported using measures of central tendency and cross-tabulations by category or interval. Aggregate data are weighted. Computer analyses were performed using the Statistical Package for the Social Sciences (SPSS). Numbers in the tables and figures may not add up to 100 percent due to rounding.

Five sections elaborate on the data collected. Section One presents the context for teacher education by examining data which describe the entire institution and its education unit. Section Two describes the status of current reforms in teacher education as reported by participating institutions. Section Three concentrates on the anatomy of a program with a focus on foundations. Section Four studies the education professoriate and Section Five, education students. A summary of highlights concludes the report.

For those interested in more technical information from the RATE Project, supporting documentation for this report is available through the ERIC Clearinghouse on Teacher Education, One Dupont Circle, Suite 610, Washington, DC 20036-2412 The documentation includes a more complete description of the procedures, a complete set of data tables, and the three survey instruments.

INSTITUTIONS AND ENROLLMENT: RESULTS AND DISCUSSION

Two parts of the institutional questionnaire are of particular concern: (1) the types of institutions which participated in the study, and (2) enrollment trends in the institutions in the sample, particularly enrollments in teacher education. Other data from the institutional questionnaire appear later in the report.

Types of Institutions Surveyed

A total of 77 institutions responded to the RATE II survey, one more than in the previous year; of these, 49 had participated in the RATE I survey. These institutions were further classified according to one of five types of historical missions: public land grant, public non-land grant, independent liberal arts, church-related liberal arts, or private university. (See Table l.)

Table 1
Historical Tradition of Institutions that House Teacher Education

	Public Land Grant	Public Non-Land Grant	Independent Liberal Arts	Church-related Liberal Arts	Private University	Total
Bachelors	1	3	2	17	-	23
Masters	3	14	3	3	2	25
Doctoral	13	11	-	1	4	29
TOTAL	17	28	5	21	6	77

Source: 1987 RATE Project Institutional Survey

Institutional Enrollment and Teacher Education Programs

Just as institutions vary in their historical missions, they also vary in enrollment size. In order to represent these differences the RATE II sampling procedures selected institutions from three categories:

- Stratum 1, smaller institutions which grant only a bachelor's degree,
- Stratum 2, medium size institutions which grant master's degrees, and
- Stratum 3, larger multipurpose universities which grant doctoral degrees

The institutional questionnaire asked respondents to report the number of students enrolled for the calendar year prior to the survey period. This means that enrollment data for the 1987 survey represented head counts for 1986. Institutions were also asked to designate whether students were enrolled as undergraduates or as post-baccalaureate or graduate students. As might be predicted, most undergraduates attend school full-time. At the graduate level, however, part-time students significantly outnumber full-time students.

Not surprisingly institutions which prepare preservice teachers and other educational personnel organize and name their education programs differently: some are colleges of education, some are schools of education, and others are departments of education. For the purposes of this report these education units are referred to as Schools, Colleges or Departments of Education (SCDEs). Inspection of data about students enrolled in SCDEs at the various colleges and universities in the sample shows diversity in the size of the education units across the three strata and also illustrates the similar patterns over the two survey periods of full-time and part-time students. These data are displayed in Table 2.

Table 2
Mean Enrollments in SCDEs

	Undergraduate				Post BA				Graduate			
	Full-Time		Part-Time		Full-Time		Part-Time		Full-Time		Part-Time	
	1985	1986	1985	1986	1985	1986	1985	1986	1985	1986	1985	1986
Bachelors	204	236	116	16	10	7	9	5	NA	NA	NA	NA
Masters	552	527	113	91	29	38	122	129	48	52	317	271
Doctoral	906	776	134	146	31	51	76	171	218	188	498	488

Source: 1986 and 1987 RATE Project Institutional Surveys

Approximately two-thirds of the students enrolled in undergraduate SCDEs attend full-time. Strata Two and Three institutions enroll more part-time than full-time graduate students.

Data for the two survey periods are strikingly similar, with two exceptions: Stratum One institutions reported very few part-time students for the RATE II survey period; and enrollments in Strata Two and Three institutions decreased during this period. This latter finding is an artifact of a slightly larger number of institutions with smaller enrollments in the second year's sample rather than an actual decrease in enrollments.

Undergraduate enrollment increased as a percentage of total enrollment in both Strata One and Two institutions, representing an increase in teacher education program enrollment. At the same time, the enrollment of full-time graduate students in Strata Two and Three institutions decreased as a percentage of total enrollment. (See Table 3.)

Table 3
SCDE Enrollments
as a Percentage of Institutional Enrollments

	Undergraduate				Graduate			
	Full-Time		Part-Time		Full-Time		Part-Time	
	1985	1986	1985	1986	1985	1986	1985	1986
Bachelors	12%	15%	15%	6%	NA	NA	NA	NA
Masters	13%	17%	15%	22%	33%	23%	39%	36%
Doctoral	8%	8%	12%	13%	14%	11%	26%	24%

Source: 1986 and 1987 RATE Project Institutional Surveys

Enrollment Trends in Teacher Education Programs

In the late 1970s and early 1980s, the number of students who chose teaching as a career declined significantly. This decline, combined with a greying teacher work force, prompted some to predict a serious teacher shortage in the 1990s. Data from this study suggest that more students are choosing teaching as a career and that indeed more are preparing for teaching.

To assess enrollment increases accurately, conclusions were drawn by analyzing only data supplied by those 49 institutions which participated in both RATE survey periods. (See Table 4.)

Table 4
Mean Teacher Education Enrollments for 1985 and 1986 for the 49 Institutions Participating in Both Survey Periods

	Undergraduate				Post BA				Graduate			
	Full-Time		Part-Time		Full-Time		Part-Time		Full-Time		Part-Time	
	1985	1986	1985	1986	1985	1986	1985	1986	1985	1986	1985	1986
Bachelors	164	236	13	19	4	7	4	3	NA	NA	NA	NA
Masters	551	620	98	90	33	39	77	86	33	49	179	187
Doctoral	755	911	119	99	28	15	57	89	113	87	230	228

Source: 1986 and 1987 RATE Institutional Surveys

These data lead to the conclusion that while enrollment patterns of students in post-baccalaureate and graduate programs remained fairly constant, all three strata experienced significant increases in the number of students enrolled in full-time undergraduate teacher preparation programs. Enrollment in undergraduate teacher education programs increased 44 percent in Stratum One, 13 percent in Stratum Two, and 21 percent in Stratum Three. This represents a total increase of 20 percent (20.2%) for all degree-granting institutions.

The institutional questionnaire also asked respondents to designate the specific programs in which preservice teacher education students were enrolled. Tables 5 and 6 compare the two survey periods.

Table 5
Teacher Education Enrollment Patterns

	Baccalaureate Level	
	1985	1986
Elementary Education	35%	36%
Secondary Education	18%	18%
Special Education	12%	10%
Early Childhood Education	7%	7%
Other	28%	29%

Source: 1986 and 1987 RATE Project Institutional Surveys

Table 6
Secondary Education Enrollment Patterns

	Baccalaureate Level	
	1985	1986
Math	26%	25%
English	25%	23%
Social Science	24%	26%
Sciences	21%	21%
Languages	6%	6%

Source: 1986 and 1987 RATE Project Institutional Surveys

Students exhibited essentially the same patterns in selecting the programs of study in both survey periods. Slightly more than one-third were preparing for careers in elementary teaching; slightly less than 20 percent in secondary teaching, and 7 and 10 percent, respectively, in early childhood and special education. Those preparing to teach in secondary schools opted for specialties in math, science, English or social studies (about 20 percent each), while only 6 percent planned to teach foreign languages.

Summary

RATE Projects I and II surveyed a random sample of institutions which offer teacher education programs. Respondents gave information about the mission and historical character of their institutions and about students enrolled in their institutions. The RATE II survey was characterized by slightly smaller total student populations than the previous year's. Controlling for differences in institutional size and using data from those 49 institutions which participated in RATE I and II leads to the conclusion that enrollment in teacher education increased from 1985 to 1986. For all institutions, students enrolled in teacher education programs in 1986 represented a larger proportion of the total student enrollment than in 1985. Enrollment data further show that the number of students preparing for teaching careers increased 44 percent in Stratum One, 13 percent in Stratum Two and 21 percent in Stratum Three institutions. When absolute size of the various institutions are accounted for, this represents a possible total increase in teacher education enrollments of more than 20 percent between 1985 and 1986. The percentage of students preparing to teach in different fields remains essentially the same for the two survey periods.

STATUS OF CURRENT REFORMS IN TEACHER EDUCATION

Within the last few years, a variety of national reports called for the reform of teacher education. In reforming teacher education, teacher educators must respond to these reports which include: *Tomorrow's Teachers* (Holmes Group, 1986), *A Nation Prepared* (Carnegie Forum on Education and the Economy, 1986), and *A Call for Change in Teacher Education* (American Association of Colleges for Teacher Education, 1985). Rate II studied the degree to which teacher educators have addressed these calls for reform.

The data in this section come from the institutional questionnaire which included 10 reform proposals common to the national reports. The respondents used a five-point scale to report the extent to which their institutions are addressing the need for teacher education reform. The points used were:

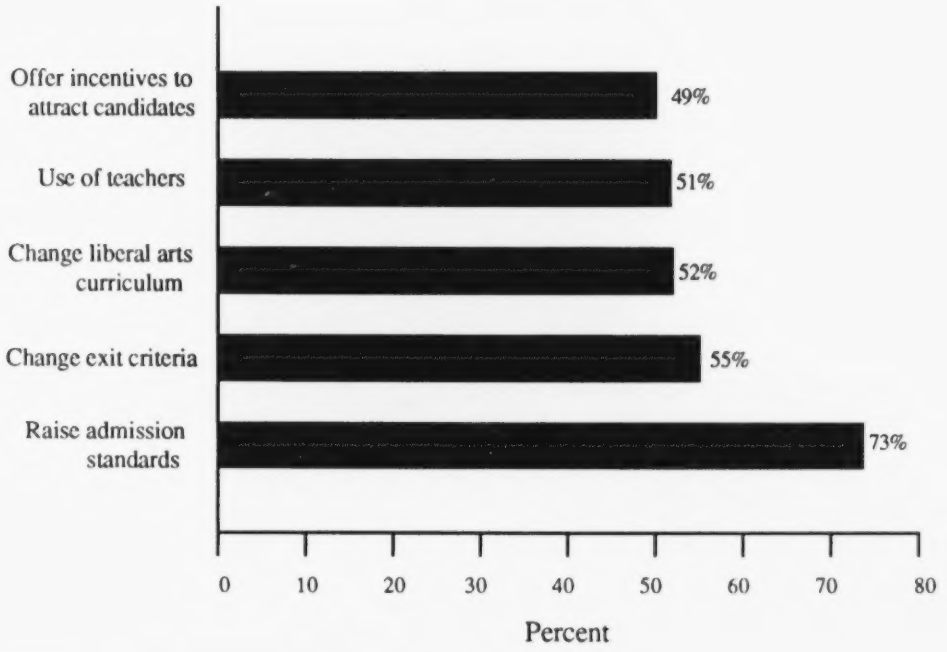
- Not all;
- Under study;
- In planning;
- Implemented within the last two years (since the publication of the national reports); and
- Implemented more than two years ago (prior to publication of the national reports).

For the purposes of this report the responses for the last two categories were aggregated to indicate the degree to which teacher educators already have considered and are currently considering program reform. The data presented in Figure 1 indicate which reforms have already been implemented.

As Figure 1 indicates, one-half or more of the institutions have actively addressed five of the 10 reform proposals included on the questionnaire. The most activity appears focused on "raising admission standards in teacher education" (73% of the respondent institutions), followed by "changing the liberal arts curriculum for

preservice teachers" (52%), "using public school teachers as teacher educators" (51%) and "offering scholarships, special loans, etc., to attract teaching candidates" (49%).

Figure 1
Status of Current Reforms



Source: 1987 RATE Project Institutional Survey

The profession clearly embraces the goal of raising admission criteria; indeed, it is more difficult to gain entry into teacher education today than it was five years ago. In light of increasing enrollments, however, making entry into teacher education more rigorous might not adversely affect enrollment size.

Changing the liberal arts curriculum for preservice teachers is another popular effort in reforming teacher education. More than half of the institutions report changes in their liberal arts requirements. In doing so, institutions address public perceptions that teachers are not liberally educated, well-rounded individuals.

As the relationship between SCDEs and local schools is strengthened, the need to involve public school teachers in the teacher education curriculum becomes apparent. The data from the RATE Project indicate that slightly more than half of the sample have used public school teachers as teacher educators. The data do not indicate, however, in what capacity.

The quality of students who enter teacher education programs is an issue in many of the national reports. One way to improve the quality of students who seek teacher certification is to offer various incentives to attract better students. Offering scholarships, special loans or other incentives to attract teaching candidates has been a reform undertaken by almost half of the respondent institutions.

The remaining five reforms have received relatively less attention. Of these, the most popular has been to develop a formal partnership(s) with a school. Fewer than five percent have instituted a five-year teacher preparation program that begins in a baccalaureate program and terminates with a certificate and a master's degree. However, given time and the monitoring of these trends, one can expect to see changes in the degree to which teacher educators address these reforms.

PROGRAM

Student and Faculty Perceptions of Program Quality

In general, most faculty and their students perceive their overall programs positively. Almost 70 percent (69.5%) of the foundations course faculty surveyed, for example, rated the teacher education programs with which they are affiliated as being good or excellent; and a majority of the remaining respondents assessed them as average (22.5%). There are, however, differences across strata. Four of five (81.4%) of the Stratum One respondents perceived their programs as better-than-average and almost three quarters of those in master's institutions concurred. Only 56.7 percent of those in doctoral-granting institutions rated their programs similarly. These findings are similar to those of last year's survey of secondary methods professors.

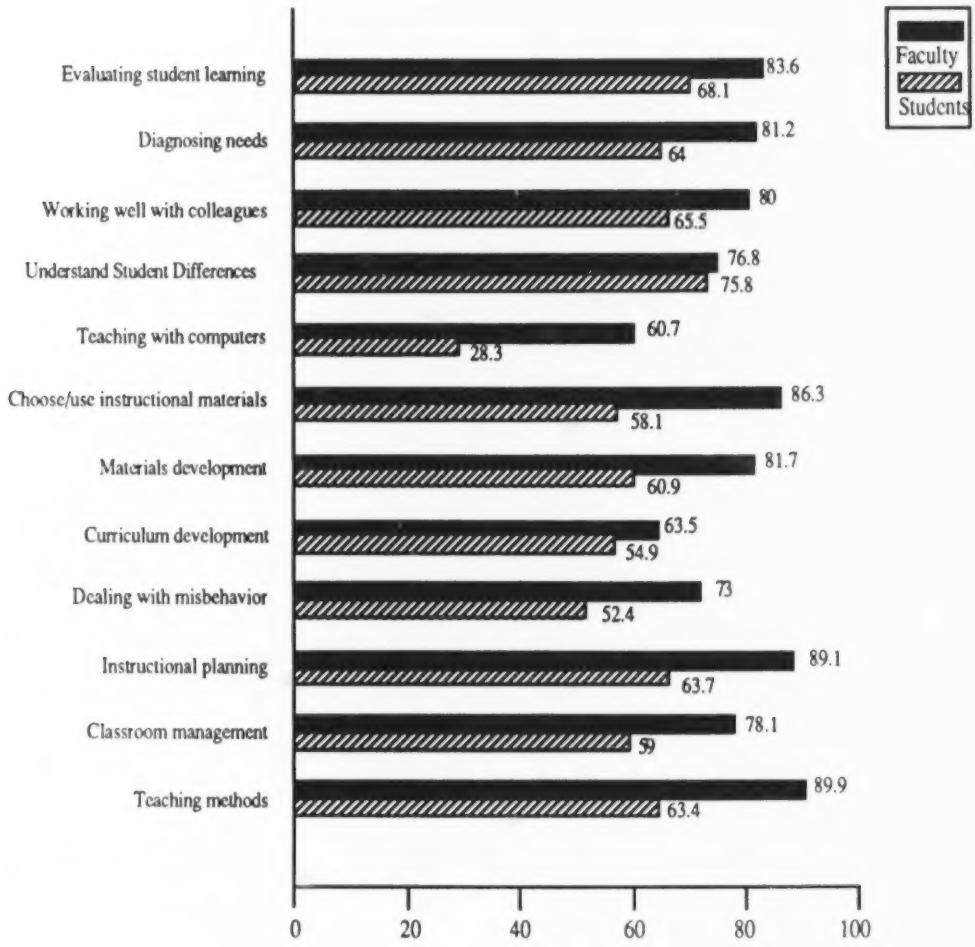
The foundations faculty were also asked how well prepared they believed their preservice teacher graduates are to teach as entry-level teachers. Students enrolled in their courses were also asked this question. Again, the responses from both parties were overwhelmingly positive. Seventy percent of the faculty and an almost identical percentage of students (69.7%) assessed their preparation as having been good or outstanding. The majority of the remaining faculty and students assessed their preparation as adequate. Again, there were differences across strata: approximately 85 percent (85.4%) of Stratum Two, about 75 percent (76.8) of Stratum One, and 50 percent (51.6%) of Stratum Three faculty viewed their students' preparation as better than average. Students also gave positive ratings although those in Stratum Two institutions were less positive than their faculty and students in Stratum Three institutions were more positive.

Responses were more uneven when faculty and students were asked whether or not these teacher education graduates are prepared to teach in a culturally diverse setting or to teach at-risk students. Responses were relatively evenly distributed across the five-point scale, indicating considerable variability both within and across institutional strata. Almost 30 percent of the faculty (29.7%) and a similar percentage of students (28.6%) indicated that they were less-than-adequately

prepared. A similar percentage reported that they were very prepared or adequately prepared. In interpreting these data educators should note that student respondents were typically in the middle of their junior years.

Perceptions of competence were not as positive when more specific understandings and abilities were introduced to faculty and student respondents. (See Figure 2.)

Figure 2
Perceptions of Readiness for Teaching



Source: 1987 RATE Project Faculty and Student Surveys

From 30 to 40 percent of faculty, depending on the item, assessed students in their teacher preparation programs as being adequately prepared to assume core functions. Most respondents assessed their students' preparation as being better-than-adequate. The percentage of faculty who considered their students less-than-prepared is small, ranging from 10 to 20 percent. Exceptions to this are faculty perceptions of students' ability to teach with computers and to deal with misbehavior in the classroom, wherein approximately 40 percent believe their students are unprepared.

The students' perceptions frequently conflict with those of their professors. Whereas 10 to 20 percent of the faculty assessed students as less-than-adequately prepared for core teaching functions, 30 to 50 percent of the students perceive themselves in this way. Hence, while the majority of students either consider themselves prepared or well prepared for various teaching functions (with the exception of teaching with computers), many nonetheless report that they are not adequately prepared to teach in terms of these core responsibilities. Again, it should be noted, that the student respondents were typically in their junior years and had not completed their teacher preparation.

Rigor of Courses

Faculty and students, in assessing the general rigor of education courses in the professional sequence, compared these to courses education students had taken in other disciplines. Faculty and students responded similarly. Less than 20 percent (15.4% of faculty, 13.4% of students) reported that their education courses were less rigorous than those in other fields. About 40 percent of the faculty (40.7%) and 34 percent of the students considered the education courses to be as rigorous as other courses they had taken while more than one-third considered the education courses more rigorous. There were some differences across strata. A larger percentage of those in Stratum One reported their education courses to be more rigorous than non-education courses. This was true for both faculty and students.

Just as perceptions of education students' abilities were less positive when the questionnaire became more specific, so too perceptions of rigor changed when faculty and students were asked to compare the intellectual rigor of foundations courses to that of specific courses which students pursued at the same academic level. The foundations courses were contrasted to courses in English, history, foreign languages, science, and mathematics. (See Table 7.)

Table 7
Perceived Rigor of Foundations Courses Compared to Arts and Science Courses

Arts & Science Courses:	Foundations Courses			No Basis for Judgment
	Less Rigorous %	As Rigorous %	More Rigorous %	%
English				
Faculty	5.9	54.3	35.8	13.9
Students	26.5	40.2	27.7	5.6
History				
Faculty	5.4	54.1	27.0	13.5
Students	24.3	35.8	29.0	11.0
Foreign Languages				
Faculty	16.9	41.8	20.2	20.5
Students	28.8	16.7	13.4	41.0
Science				
Faculty	34.2	39.6	12.8	13.4
Students	42.5	29.3	18.2	9.9
Math				
Faculty	33.6	38.3	14.0	14.1
Students	42.5	26.1	21.0	10.5

Source: 1987 RATE Project Faculty and Student Surveys

Slightly more than 90 percent of the faculty rated their courses as being as rigorous as or more rigorous than an English course and 80 percent (81.1%) considered the course as rigorous as or more rigorous than a history course. The percentages dropped sharply for foreign languages, science, and mathematics: the percentage of faculty who assessed the foundations course to be as rigorous as or more rigorous than those courses was 62 percent, 52.5 percent, and 52.3 percent, respectively.

Student comparisons were less positive. Two-thirds of the students rated their foundations course to be as intellectually rigorous as English and history. Four in 10 rated it as being comparable to a course in science or math but only 30 percent found it to be more rigorous than a foreign language course.

Forty percent of the students reported no basis for comparison with a foreign language course; almost 20 percent of the faculty indicated the same. One could conclude from this a lack of involvement with a second language by a considerable number of students and faculty. These data are similar to last year's in terms of both faculty and student responses.

There is little doubt that faculty and students view education courses as being more time-consuming than non-education courses. This may be due to the numerous field-based assignments in many courses. In fact, more than 80 percent view education courses as more time consuming than non-education courses.

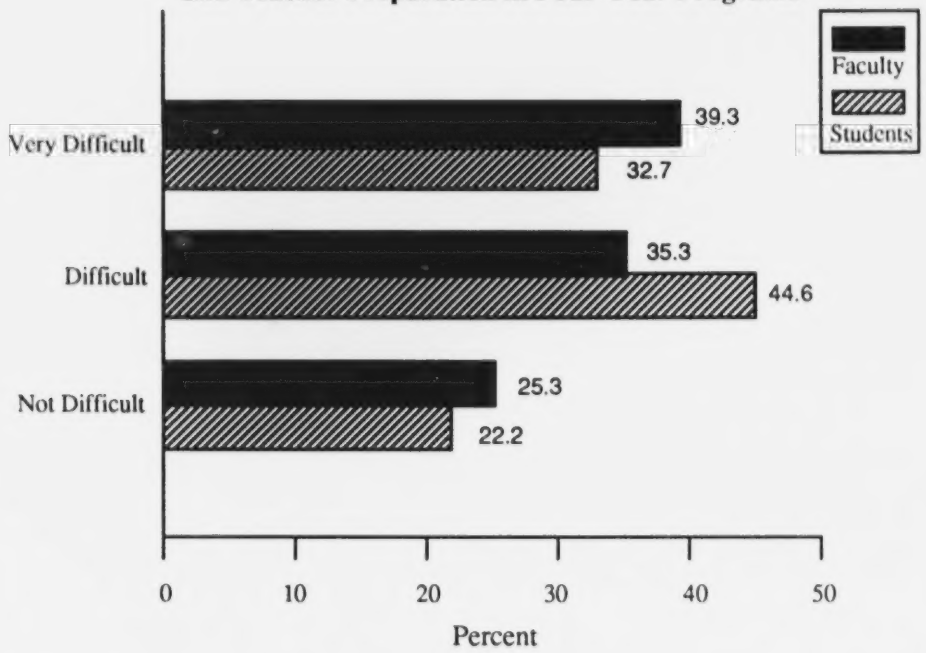
Given the pervasive concern over the character and quality of general studies and its relationship to professional studies in education, selected RATE II items addressed the arts, sciences and humanities. Students and faculty were asked how important they believed general studies were to the education of a teacher. More than 85 percent of the faculty responded that general studies were important or extremely important to a prospective teacher's education. An even higher percentage of students (94.1%) responded similarly.

Students were also asked to assess the quality of the liberal arts courses which they had taken. Slightly more than 40 percent (40.6%) assessed the quality of these courses as having been adequate and more than 50 percent (51.3%) rated them as having been very good or outstanding. There were no basic differences across strata: Stratum Three students assessed the quality of their general studies almost as highly as did Stratum One students. These data raise questions and call for further investigation in light of the pervasive concern about the quality of general studies across the country.

Many who advocate substantial change or reform in teacher preparation claim that prospective teachers cannot acquire a well-rounded liberal education and adequate professional preparation within a four-year undergraduate program. Thus, we questioned faculty and students on this topic.

Students and faculty alike agree that there are problems in this regard. Approximately one-fourth of the faculty (25.3%) and one-fifth of the students (22.2%) indicated that this dual mission is not a difficult one (Figure 3). Not surprisingly, there were strata differences here. Forty (40.5) percent of Stratum One faculty, 26.9 percent of Stratum Two faculty, and almost 50 percent (48.3%) of Stratum Three faculty reported that it is difficult to receive a well-rounded education and to be prepared as a teacher in four years. More students than faculty in the baccalaureate and master's institutions reported this as being quite difficult.

Figure 3
Ability To Acquire Quality Liberal Education and Teacher Preparation in Four-Year Programs



Source: 1987 RATE Project Faculty and Student Surveys

Perceptions of the Nature and Character of Foundations Courses

Students and faculty also evaluated the general quality of foundations study. Generally, the quality of foundations study was considered to be very adequate. More than 90 percent of the faculty rated the foundations component as being either adequate or outstanding (92.1%). Students were equally positive. More than 40 percent rated the foundations component as being adequate, and almost 50 percent found it to be either better than adequate or outstanding.

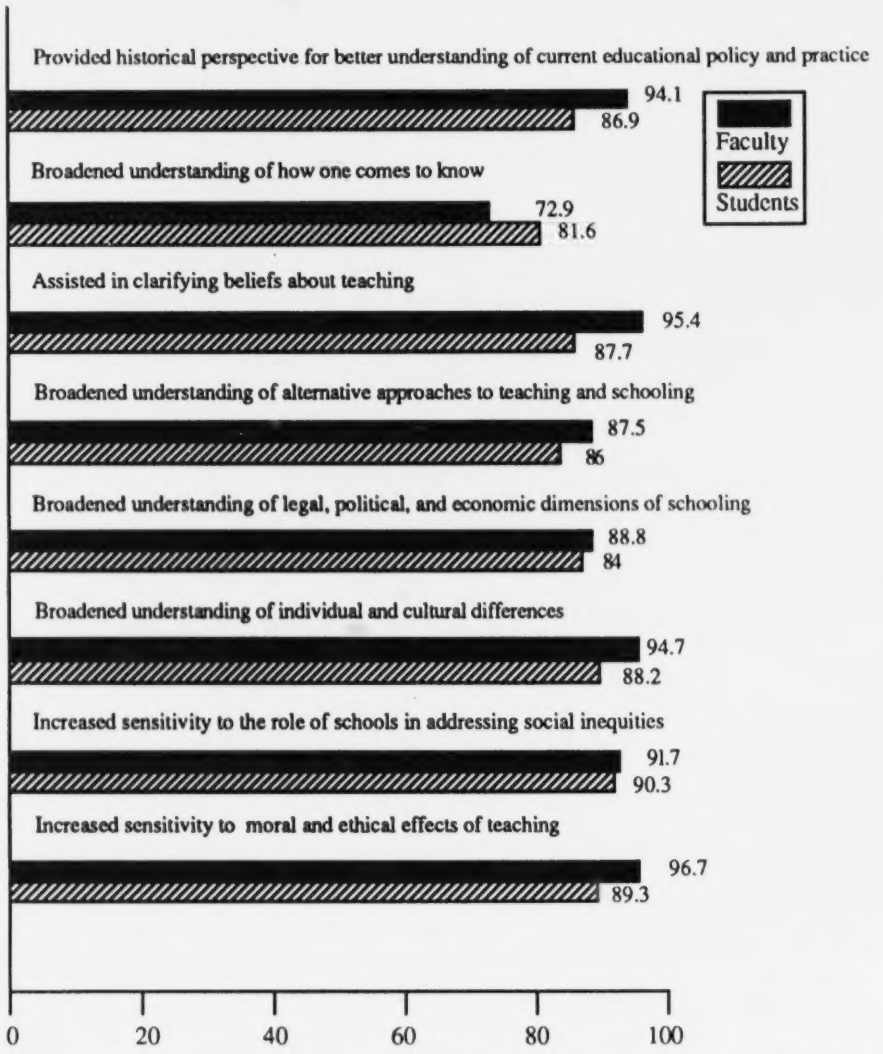
Students and faculty were asked to consider the importance of foundations study. More than 80 percent of the faculty rated foundations study as being very or extremely important. More than 60 percent of the students responded similarly, while another 27.4 percent responded that foundations study is important.

The survey assessed the extent to which a number of the disciplines were perceived as contributing to foundations study in education. The core disciplines which were enumerated in the survey included: philosophy, history, economics, political science, sociology, anthropology, psychology, and religion. The discipline most frequently cited as being addressed in foundations courses was psychology, followed in turn by philosophy, sociology, and history. Core disciplines which

were reported as being rarely or never addressed in the foundations component included economics, political science, anthropology, and religion.

A number of understandings and attitudes commonly viewed as being central to foundations study were identified. Faculty and students were questioned about how well prepared the students are in regard to these. (See Figure 4.)

Figure 4
Perceptions of Outcomes of Foundations Courses



Source: 1987 RATE Project Faculty and Student Surveys

Data analysis in Figure 4 supports the positive ratings of faculty and students, especially student understanding as a result of their foundations courses. With the exception of "broadening students' understanding of how one comes to know," the majority of faculty, often a considerable majority, rated the degree of student understandings very positively. Once again, students were equally positive and in some instances, more positive than the faculty.

As in RATE I, the extent to which different general pedagogical methods were employed in professional education courses was studied. The specific types of methods surveyed by RATE II were modified somewhat to reflect foundations courses. Socratic dialogue and logical analysis of concepts were added to the previous year's list of methods.

Lecture and group discussion remain the staples of college teaching, or at least more respondents reported employing these methods more frequently than others. However, almost half of the foundations faculty report frequent engagement in the logical analysis of concepts and more than 40 percent indicate a similar use of Socratic dialogue. Peer or microteaching and field trips appear to be rarely employed in foundations courses, and the use of computers is almost nonexistent.

An attempt was again made to examine the amount of time students enrolled in various education courses spend on course work beyond scheduled classes. The data on foundations courses are similar to that reported last year for secondary methods classes. Foundations faculty report that they typically expect about six hours of homework per week and students correspondingly report that this is approximately the amount of time they give to these courses.

Faculty were asked how often they reviewed research in their courses. Thirty-one percent (31.5%) reported doing this occasionally, and almost 60 percent (56.3%) indicated doing so frequently. Students' perceptions, however, do not corroborate faculty views in this regard. Almost a third of the students reported occasional engagement with research studies, and another third indicated that they frequently are engaged with research studies as part of their work in foundations.

One-quarter of the faculty indicated that they occasionally required library assignments in which students were asked to engage in various forms of research. Almost 60 percent of the faculty reported frequently requiring library research. Once again, student responses were different, with approximately 40 percent reporting frequent engagement in library research. It is disturbing to find that a little more than one-third of the students rarely, if ever, either review research or engage in library activity as part of their course work .

Summary

The results of RATE II concerning student and faculty perceptions of teacher education programs support many findings of RATE I. The general quality of programs is viewed as being quite high. However, when specific abilities and attitudes desired in beginning teachers are assessed, the portrayal is more uneven in terms of quality. While a substantial number of students and faculty report adequate or better than adequate preparation relative to a number of core teaching functions

and fundamental understandings, a sizeable minority nonetheless report that they are not adequately prepared. A considerable number of future teachers report that they are not as yet adequately prepared to teach in a multicultural context or in a classroom comprised of at-risk children.

While opinions vary about whether or not there is adequate time for the preparation of teachers within a four-year undergraduate program, many faculty and students report that it is difficult to acquire both a quality liberal arts education and professional preparation in that time. Of course, a number of factors come to bear in terms of institutional differences in mission and structure and the degree of integration between professional and general studies. Faculty generally do not share a similar concern about the amount of time provided for students to engage in professional studies. While it is not clear why this is the case, it suggests that professional studies, in some instances at least, have been gained at the expense of general studies.

Perhaps what is most surprising about this second phase of data collection is how highly faculty and students valued study in the liberal arts and in teacher education foundations. It is also surprising to find how highly they rate the quality of that course work. These data portray a very positive picture, but obviously more study into the nature and character of both general studies and foundational study and their actual effects on students is needed.

These data provide encouraging findings about the rigor and quality of education courses and general studies, and about the diversity of teaching methods employed by faculty. However, concerns and problems are also apparent. Across the board, some students report that they are not adequately prepared to become teachers. The ability to use modern technology or speak a second language is reported by almost no one. Beyond this we know little about what standards were employed for making these judgments or how the students and faculty who provided assessments perceive good teaching.

FACULTY

RATE II surveyed characteristics about the faculty who teach the introductory foundations courses, including their background and preparation, scholarly productivity, activity in schools, other professional activities, and salaries. These faculty and the secondary methods faculty described in the RATE I report were compared, as were male and female professors who teach foundations courses. In this section, these data from the faculty questionnaire are described and analyzed.

Demographics

Approximately 90 percent (91%) of the faculty (N = 153) are White, 5 percent are Black, and 4 percent are Asian or Pacific Islander. There are no Hispanics, American Indians or Alaskan Natives in the sample. Almost three-quarters (72.4%) are male and 27.6 percent are female. More than 70 percent are White males. The percentage of minority faculty is too small to permit any interpretation of the data beyond a general lament about the low percentage of minority faculty teaching these courses to the future teachers of America.

The majority of the faculty are tenured and have reached the upper ranks of their profession.

Table 8
Percentage of Faculty by Rank Who Teach Foundations Courses

Rank			
Professor	**Associate**	**Assistant**	**Other**
44.7	29.6	20.4	5.2

Source: 1987 RATE Project Faculty Survey

In general, the faculty are middle-aged. The average age of faculty is 49 years; males average slightly more than 50 years of age and females, nearly 47. Both male and female professors' average age is 53 and associate professors' average is 47. Male assistant professors average 43 years, while females average 46. Thus, the mean age of faculty even at the assistant level is well over 40.

Faculty mean salaries vary by strata: $29,732 at Stratum One, $32,309 at Stratum Two, and $35,470 at Stratum Three. Salary data are self-reported.

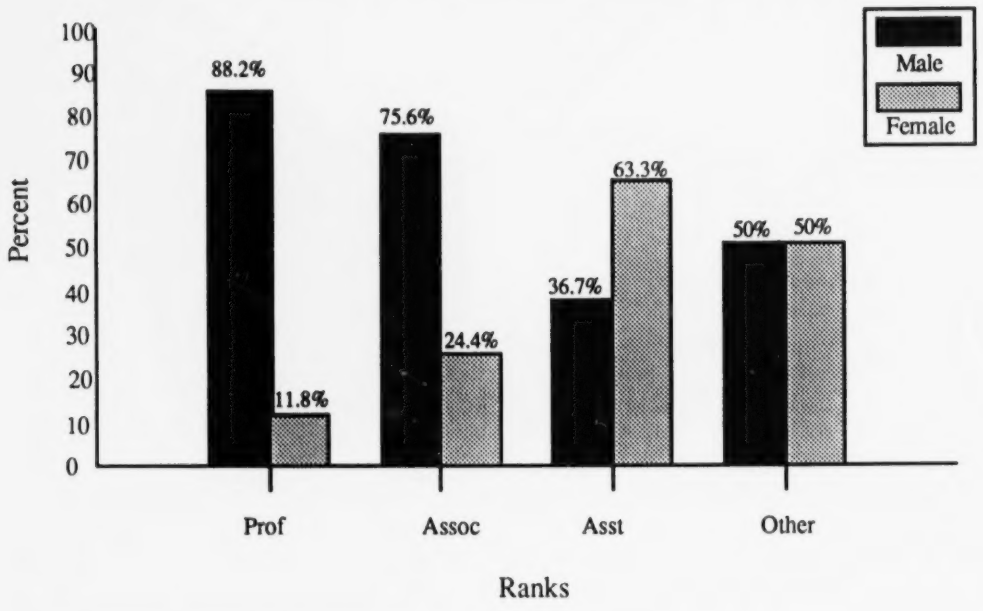
Approximately 80 percent of the faculty hold the doctoral degree. The percentage of those with the doctorate varies somewhat across Strata One, Two, and Three: 81, 76, and 85.2 percent, respectively. The percentage of those holding the Ed.D. or the Ph.D. varies considerably from stratum to stratum as well. A larger percentage of those holding the Ph.D. degree (56%) are in Stratum Three, 37 percent are in Stratum One, and 38 percent in Stratum Two institutions.

The faculty are stable, having been in higher education for an average of more than 16 years and at their current institutions for more than 13 years. More than 7 in 10 (71.9%) expect to remain at their current institutions. The average number of institutions at which faculty have been employed is slightly more than two.

Gender Differences

There are many differences across gender in the survey sample, many of which are linked to academic rank. Females, who constitute nearly 28 percent of the total sample represent only 12 percent of the full professors. Only 19 percent of the women are full professors, while 55 percent of the men are. Forty-five percent of the women hold assistant professorships compared to 10 percent (10.1%) of the men. As Figure 5 reveals, men hold 88 percent of the full professorships, while women hold 63 percent of the assistant professorships.

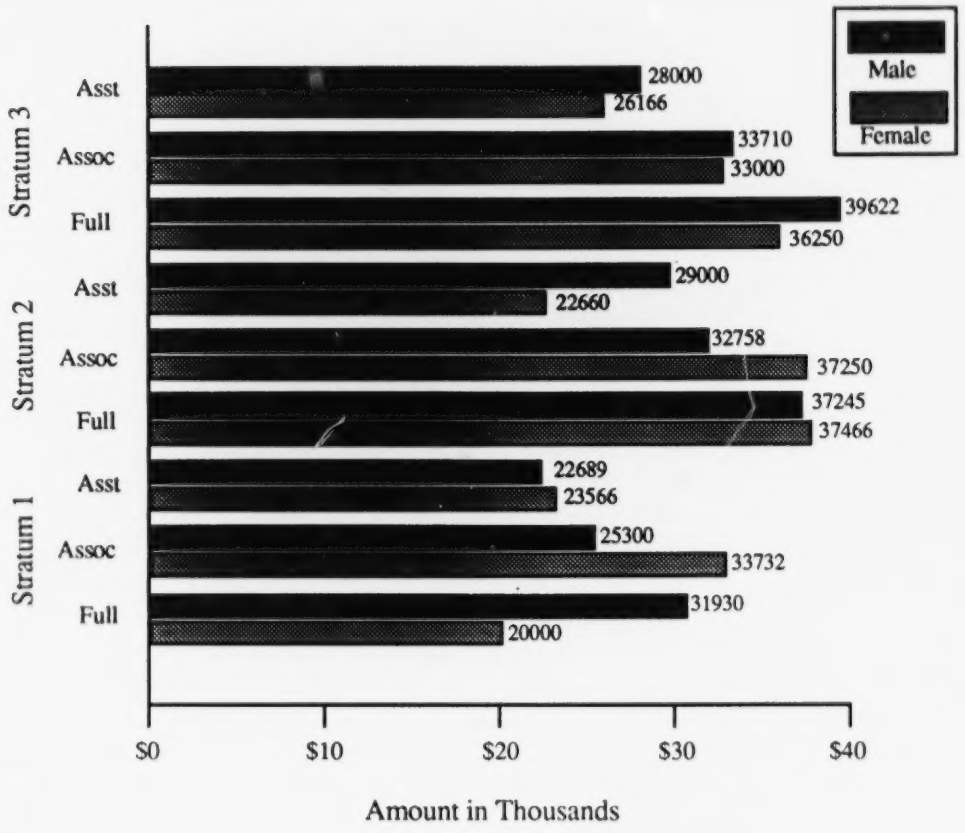
Figure 5
Rank and Gender of Faculty Teaching Foundations Courses



Source: 1987 RATE Project Faculty Survey

There are salary differences across gender, rank, and institution. Females' salaries at the assistant professor level are slightly higher in Stratum One institutions, slightly lower in Stratum Three, and considerably lower in Stratum Two. On the other hand, in each stratum, females' mean salaries are as high as or higher than males at the associate level, and are considerably higher in Stratum One institutions. At the full professor rank there is a difference within Stratum One institutions, where females received an average of almost $10 thousand dollars less than their male counterparts. (See Figure 6.)

Figure 6
Salaries of Faculty Teaching Foundations Courses



Source: 1987 RATE Project Faculty Survey

Given the limited sample size of faculty respondents and a variety of factors unique to different institutions, it is difficult to generalize about and interpret these data. While more females are joining the ranks of assistant professors, their salary at this level is slightly lower than their male colleagues'. At other academic ranks they fare better with the exception of the anomaly which exists at the full professor rank in Stratum One institutions.

Lifetime publications were also examined by gender: almost half of the females (48.3%) had never published compared to approximately one-third of the males (31.2%). The differences in salaries at the assistant professor level and in the lifetime publishing records between men and women faculty call for analysis beyond the scope of the RATE study. At the least, however, the data suggest the need for institutional attention to the work status of and reward systems for women faculty.

Nature of Foundations Faculty and Their Courses

The faculty teaching foundations courses prefer the title of professor (31.7%) or professor of education (35.2%). Only 14.5 percent prefer to be called "teacher educators." Almost twice as many of the secondary methods faculty sampled a year ago (27.1%) preferred the latter title.

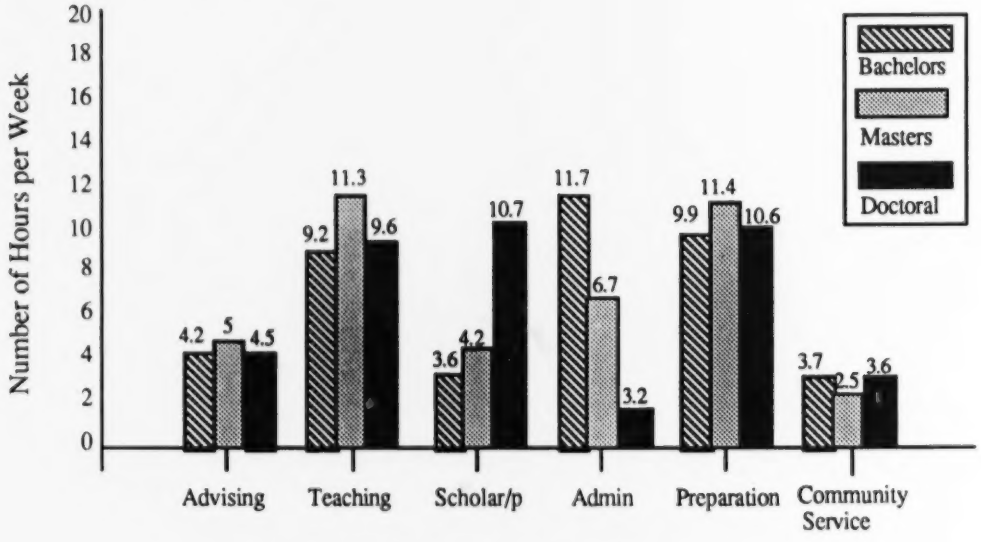
For purposes of the RATE II questionnaire *foundations of education* was defined as being those education courses or course components which engage students in a critical examination of the relationships between disciplines such as philosophy, sociology, and history and educational practice and policy. The course or course components were to be part of the professional education sequence and not part of the general studies or liberal arts curriculum. Respondents were instructed also that foundations courses were not to be defined as introductory education courses which serve primarily to provide career orientation, nor to view them as courses in educational psychology or related courses (e.g., child development or psychology of the adolescent). This definition of foundations courses was part of the questionnaire, and institutional representatives were enjoined not to have faculty complete the questionnaires if they taught no courses approximating this description.

Nonetheless the word "foundations," a variant of it, or a word from traditional foundations emphases such as "historical" or "philosophical" appears in only 60 percent of the course titles reported. This lack of correspondence between course titles and traditional foundational areas could result from the fact that fewer than one-third (32%) of those teaching the courses earned doctoral degrees in foundational disciplines. Among the concentrations in the doctorate work of reporting faculty are educational administration, business education, early childhood, hearing, higher education, social studies, special education, and urban education. Thus, there is great disparity in terms of what constitutes foundational study from campus to campus and in the preparation of faculty who teach these courses. In addition, 78 percent of the faculty whose doctoral study was traditional foundational areas are in Stratum Three institutions. Although course titles may be misleading, the variability among course titles and the number of faculty who have not had academic preparation in traditional foundational areas suggests that a more comprehensive study of foundations courses for undergraduates is in order.

Faculty Activities

The major areas of faculty effort are evenly divided among the three strata with two exceptions: administration and scholarship. (See Figure 7.)

Figure 7
Allocation of Faculty Time



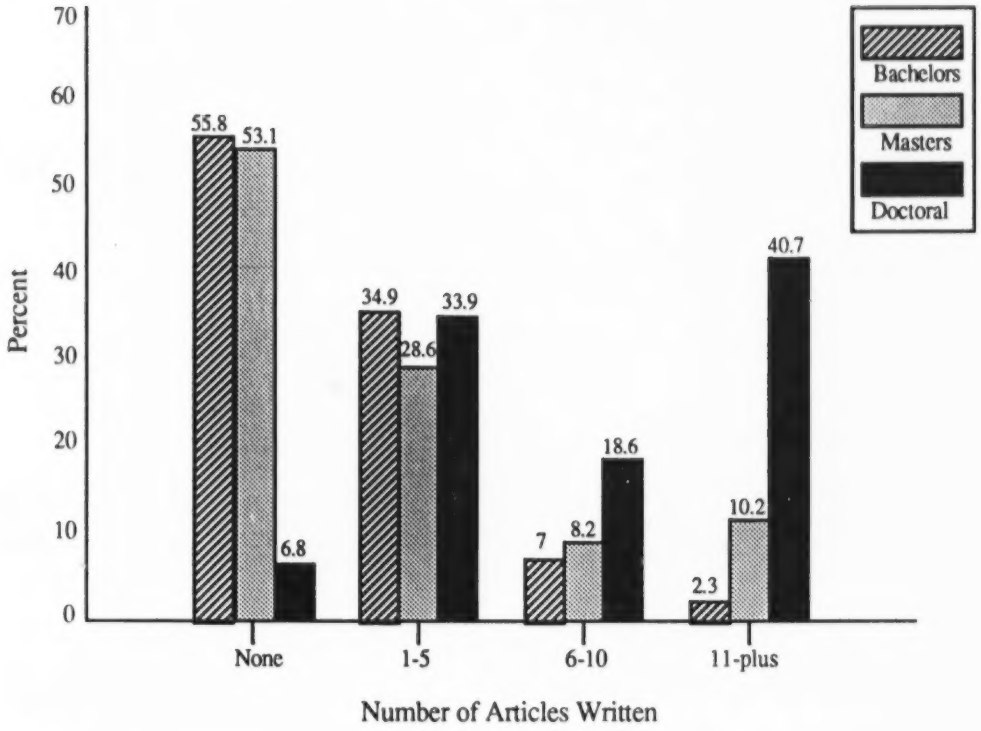
Source: 1987 RATE Project Faculty Survey

Faculty in Stratum One institutions spend considerably more time in administrative functions than do faculty in other kinds of institutions. Faculty in Stratum Three institutions give more than twice as much time to scholarship and research as do their colleagues in Strata One and Two institutions.

The latter difference in emphasis is reflected in the considerably larger number of articles Stratum Three faculty published in refereed journals during their careers. Stratum One faculty average nearly two articles; Stratum Two faculty, three; and Stratum Three faculty, thirteen.

Figure 8 shows faculty scholarly productivity in another way. More than 50 percent of the faculty in Strata One and Two institutions have no published, refereed articles to their credit, whereas 40 percent of the faculty in Stratum Three institutions have published eleven or more such articles during their careers.

Figure 8
Articles Written by Foundations Faculty



Source: 1987 RATE Project Faculty Survey

There is a positive relationship between the percentage of effort faculty perceive that their institutions would like them to devote to scholarship and their publication rates: bachelors, 14 percent (mean faculty percent of time they believe should be devoted to scholarship); masters, 17 percent; doctoral, 32 percent. Thus, even at Strata One and Two institutions, the faculty members generally perceive that about one-seventh of their time or better than one-half day per week is expected to be devoted to scholarship.

In addition to scholarly activity, foundations faculty teach, advise, hold regular office hours and perform the expected range of tasks of higher education faculty. Faculty teaching loads appear slightly higher in Stratum Two institutions, as Table 9 illustrates.

Table 9
Courses Taught Per Year and Weekly Office Hours

Institution Type	Courses Taught	Office Hours
Bachelors	5.3	9.7
Masters	6.4	10.8
Doctorate	5.8	7.5
Average	5.9	9.2

Source: RATE Project Faculty Survey

Foundations and Secondary Methods Faculty: Some Differences

The profiles of introductory foundations and secondary methods faculty differ significantly. They differ in distribution across rank. Almost 45 percent of the foundations faculty (44.7%) are full professors, while only 38.6 percent of those teaching methods courses are. Correspondingly, 27 percent of the methods faculty and only 20 percent (20.4%) of the foundations faculty are assistant professors.

The two faculty samples also differ in how they spend their time. Secondary methods faculty spend 90 percent more time supervising student teachers than do foundations faculty, while the latter spend approximately 30 percent more time in scholarly activities, a distinction not reflected in lifetime publication of refereed articles. Neither group provides much inservice education for experienced teachers and both spend approximately the same amount of time in campus committee work.

The two samples differ in the amount of time spent in local K-12 schools monthly and in what they do there. Secondary methods faculty spend nearly 12 hours more monthly in the schools than do foundations faculty, with the major differences occurring in supervision of early field experiences and student teaching. And while the amount of time is small, secondary methods faculty devote more time to conducting research in the schools.

The grading patterns of the two types of education faculty also vary somewhat. Seventy-seven percent of the students in the secondary methods courses received *A* s and *B* s, while 65 percent of the students in foundations courses did. The disparity is even greater in the distribution of *A* s. About one in 10 of the students (9%) in introductory foundations courses received *D* s or *F* s but only 3 percent of the students in the secondary methods courses received failing grades. One possible explanation for these differences is that foundations courses are usually

taken earlier in students' programs and thus may include some academically weaker or less motivated students who will no longer be in the program by the time of the secondary methods courses.

The introductory foundations faculty required an average of 5.8 hours weekly of out-of-class activities. The secondary methods faculty require 7.5 hours. The latter difference may be explained in terms of in-school, field experience by students in the secondary methods course.

Summary

The faculty who teach the introductory foundations courses are similar to most other faculty. They are middle-aged, White males, who are professionally active, tenured, promoted, and place-bound. The combination of changes which could emanate from the national reform movements in teacher education curricula and the increasing number of aging faculty who will soon retire suggest changes may lie in the not-too-distant future.

STUDENTS: DEMOGRAPHIC PROFILE

This section of the RATE report discusses the diverse backgrounds and characteristics of foundations course students. Data reported herein are drawn from 729 student respondents enrolled in foundations courses across the three strata, as follows: Stratum One, 190 responses; Stratum Two, 223 responses; and Stratum Three, 316 responses.

Demographic Data

The following analysis discusses the background characteristics of students. The mean age for students is 24 years (24.3). Students in baccalaureate and master's institutions were slightly under 24, and students in doctoral degree institutions were over 25 years of age. Thus, students in Strata One and Two are slightly younger than students in Stratum Three; this is consistent with last year's data as well. About one-fourth of the students (25.2%) are married. The highest percentage of married students (29.9%) are in doctoral institutions. For the entire population of students, 76.3 percent are female (23.7%, male) with, as last year, slightly more males in Stratum One institutions.

The racial or ethnic distribution of the students across all strata is:

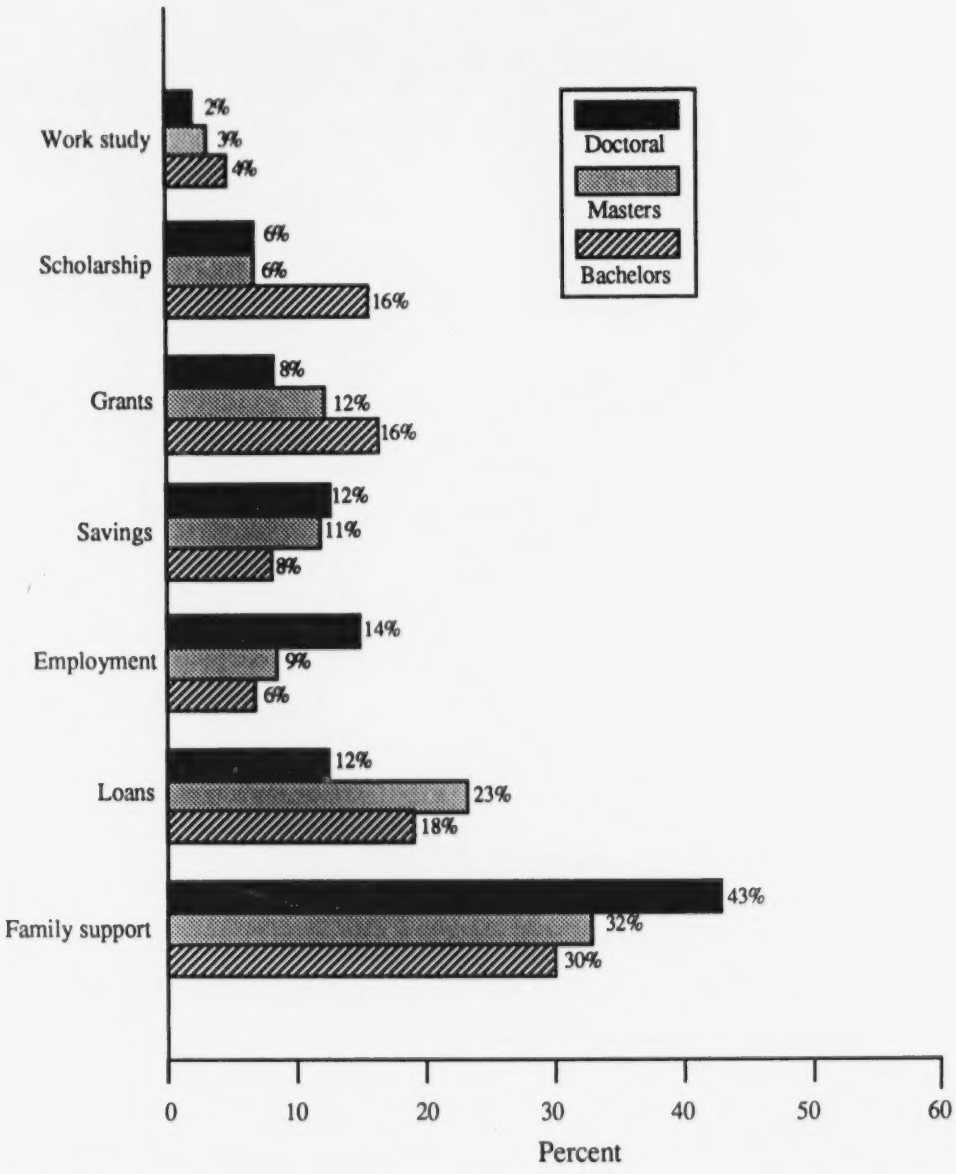
- 91.3 percent White
- 4.3 percent Black
- 1.5 percent Hispanic
- 2.5 percent Asian or Pacific Islander, and
- 0.3 percent American Indian or Alaskan native

There were no Blacks reported in Stratum One institutions, 8 percent reported in Stratum Two institutions, and 4 percent in Stratum Three institutions. This profile is comparable to the 1986 data base, although the percentage of Hispanics in this year's sample has now dropped from 2.8 percent to 1.5 percent.

Nine of 10 students are enrolled full-time (i.e., taking 12 or more credits during the term). The mean annual cost of college attendance including tuition, room, board, books and incidentals is $5,635. Stratum Two institutions are less expensive than either of the other Strata, as in 1986, while Stratum One institutions are the most expensive ($6,702). It costs $1,800 less to go to a Stratum Two institution and $1,200 less to go to a Stratum Three institution. Given a tenure of slightly more than four years in school, the average cost of initial certification as a teacher is approximately $25,000.

Students were asked to identify sources of financial support for their college education. Students responding to this question (about 85 percent of the population polled) report that 37 percent of their support comes from family sources. Students rely on grants to finance 11 percent of the cost of college, and scholarships for about 9 percent. Loans subsidize 17 percent of the costs. Work-study provides only modest support across all strata at 3 percent, but employment accounts for 10.4 percent of the funds. Students in Stratum Three institutions place the highest dependence on employment (13.7 percent). Personal savings account for 10.4 percent of the funds across strata. Clearly, students use multiple sources in putting together the funds to support their college education. Differences between institutional types are illustrated in Figure 9.

Figure 9
Students' Sources of Financial Support



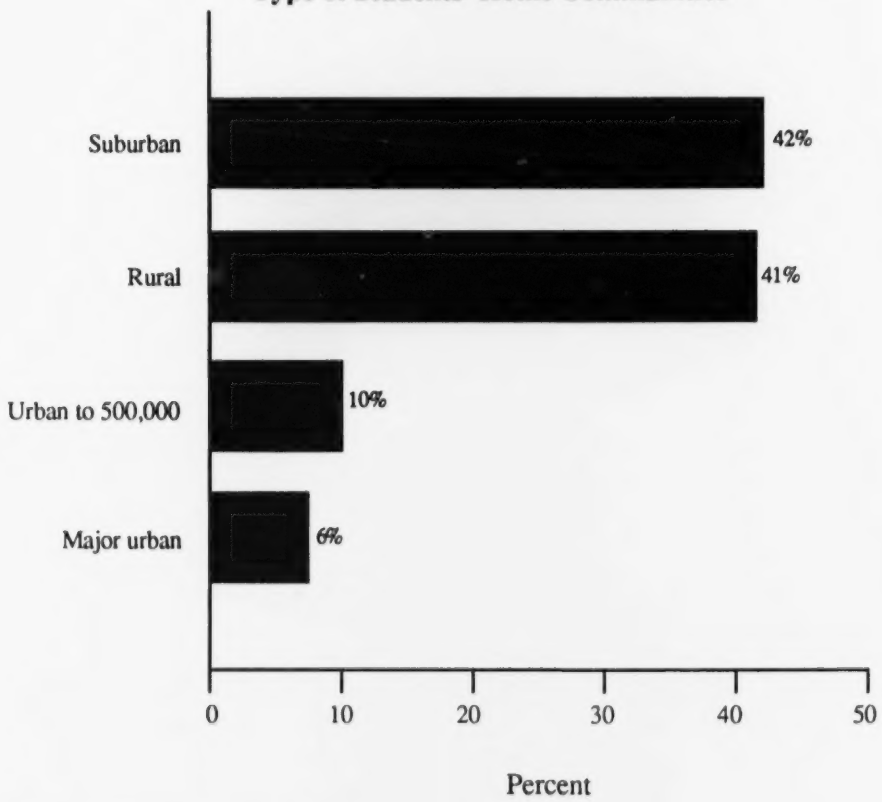
Source: 1987 RATE Project Student Survey

A slightly higher proportion of RATE II students live on campus than did RATE I students, up from 53 percent to 58 percent. Slightly more students live on campus at Stratum Two institutions than at Strata One or Three campuses. A little more than half (50.4%) of the student population travels 50 or fewer miles from

their family residences to campus; 69 percent live within 100 miles, and 93.2 percent of all respondents live within a 500-mile radius of campus. In Stratum Two institutions only one-fourth of the students attend a school that is more than 50 miles away from family residences. About one-half of the students in Strata One and Three institutions come from beyond 50 miles to campus.

These data are comparable to the 1986 data, as is the profile of the type of community in which students spent most of their youth. Across strata, 41.2 percent grew up in rural communities, 41.8 percent in suburban communities, 9.7 percent in urban areas, and 5.8 percent in major urban areas.

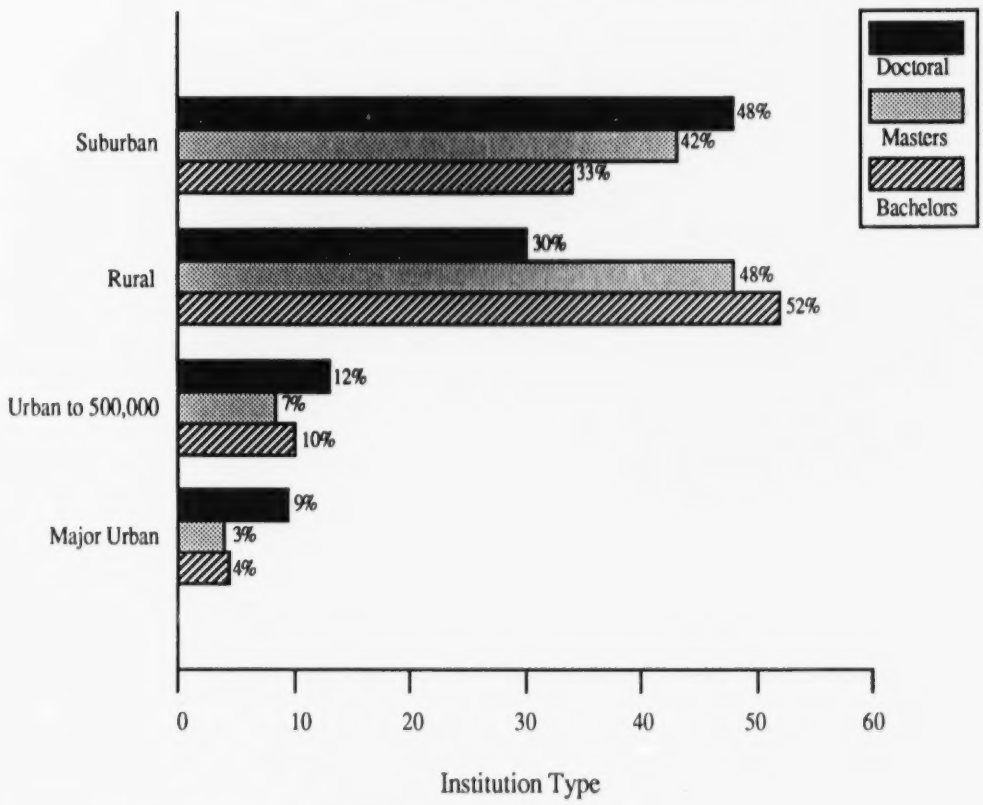
Figure 10
Type of Students' Home Communities



Source: 1987 RATE Project Student Survey

Last year's urban proportion (combining urban and major urban) was 17.8 percent; this year's is 15.5 percent. Stratum Three institutions have more urban students (20.7 percent) than do either Stratum Two (10%) or Stratum One institutions (13.2%), and they have fewer rural students (only 30.3%) as compared to Stratum One (51.6%) or Stratum Two (48%). Figure 11 displays the home communities of students by institutional type.

Figure 11
Students' Home Communities by Institutional Type



Source: 1987 RATE Project Student Survey

Career Data

Students were asked to indicate the extent to which various factors influenced their decisions to enroll in teacher preparation programs. The percentages noted represent a combination of points four and five on a five-point scale and indicate "a considerable extent." Although the influence of friends decreased, the 1987 responses were similar to those given in 1986.

Table 10
Students' Reasons for Enrolling in Teacher Education Programs

Reasons	Rate I 1986 Secondary Methods	Rate II 1987 Foundations
Helping children grow and learn	90%	95%
Seems to be a challenging field	63%	65%
Sense of vocation and honor of teaching	52%	52%
Like working conditions (e.g., calendar, security)	54%	52%
Inspired by favorite teachers	53%	45%
Could be admitted and would succeed	41%	44%
Could lead to career in other areas	44%	40%
Liked reputation of Education on campus	22%	23%
Inspired by parents	22%	23%
Friends are majoring in Education	20%	23%

Source: 1986 and 1987 RATE Project Student Survey

When asked their present feelings about choosing teaching as a career, 91 percent of the students (up from 85 percent last year) are "positive" to "very positive" across all strata and 87 percent indicate their intention to go into teaching after graduation. Sixty-three percent indicate plans to teach five years or longer; of the 13 percent who do not plan to go directly into teaching, two-thirds plan to enter a field related to education or to enter graduate school.

Students were asked what impact the teacher preparation program has had on their attitudes toward teaching. Almost two-thirds (65%) report that their attitude is now more positive and another 25 percent remain as positive as when they began the program.

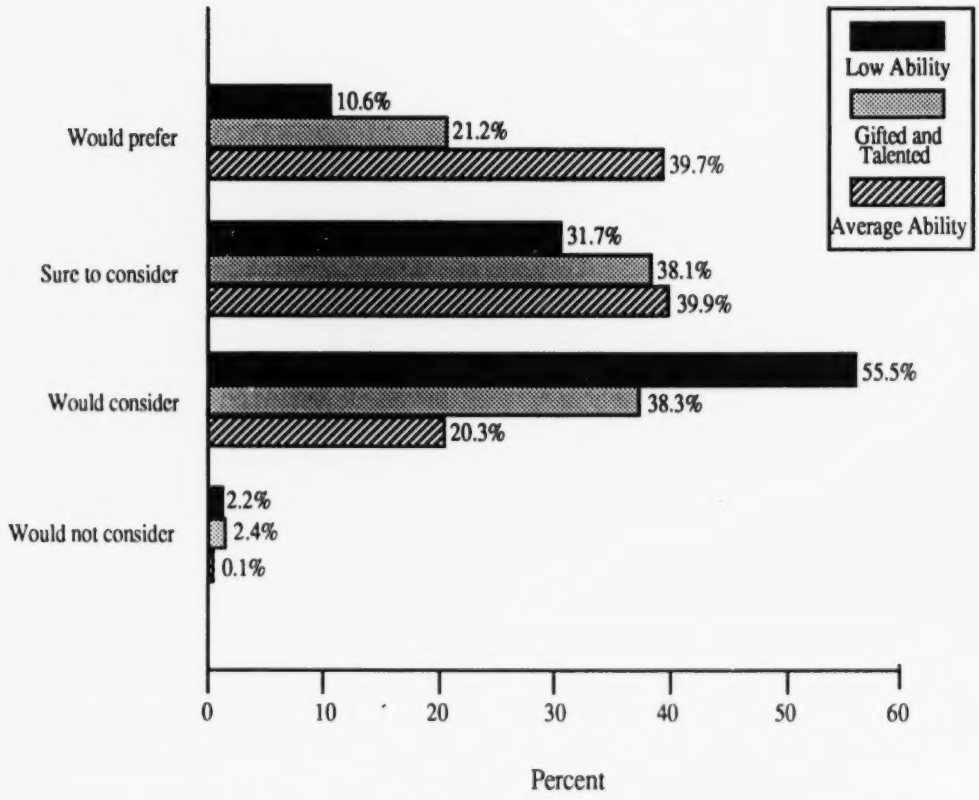
Results were similar from 1986 to 1987 in response to the adequacy of a teacher's salary to support a single person. Sixty percent said the salary was adequate and another 27 percent found it more than adequate for a single person. Many more--92 percent--said the salary was less than adequate to support a family. Stratum Three students expressed more concern about the adequacy of teachers' salaries than did other students.

Student preferences for job placement have shifted a bit since last year when most students (54 percent) desired to teach in suburban areas. This year, only 42 percent preferred this type of community. In contrast, interest in rural areas has increased from 27 percent last year to 42 percent this year. Unfortunately, interest in urban areas, decreased from 15 percent to 9 percent, with 16 percent of RATE II students desiring to teach in urban or major urban areas as opposed to 19 percent of last year's sample.

Most students are also interested in taking teaching positions within their home states (58%), which is up from last year. Fifty-three percent would not seek a teaching position elsewhere in the nation, but 80 percent would go within 50 miles of their home or their graduating institution to assume a teaching position.

Students were asked to indicate the types of students and school and socioeconomic settings they would prefer for their first teaching assignments. This priority profile is similar to that in 1986. Figure 12 illustrates the preferences of students in teaching students of varying ability. About 40 percent prefer to teach students of average ability and about 20 percent would prefer having gifted-and-talented students. Only about one in 10 prospective teachers would prefer teaching students of low ability, although about another three in 10 would consider doing so.

Figure 12
Students' Perceptions About Teaching Children of Different Ability Levels



Source: 1987 RATE Project Student Survey

The desire to teach pupils with various types of learning disabilities is exhibited, perhaps understandably, by even fewer students. Only about one in 20 students indicate this is a preference. Another 20 percent would consider teaching those pupils with learning or physical disabilities, but only 12 percent would consider teaching emotionally handicapped students and 10 percent mentally handicapped.

Responses to preferences for teaching culturally diverse pupils are similar. Approximately one in eight (13.7%) of the education students indicated a preference for teaching culturally diverse pupils, although 38 percent indicated a willingness to consider this opportunity. The preference for teaching low-income students is even less: only 6 percent reported that they would prefer this. Most students would prefer to teach middle-income pupils who reflect their own backgrounds.

Finally, prospective teachers were asked whether they would prefer more traditional or more experimental schools and classrooms; preferences are very much toward more traditional settings.

Program Activity

Sixty-three percent of all students initially entered higher education in the institution they are now attending, with a slightly higher rate of retention in the Stratum One institutions. Transfer students (37 percent) carried with them 76 quarter hours or 53 semester hours.

Student respondents had completed an average of 116 quarter hours or 76 semester hours, leaving them three-quarters of the way through their baccalaureate studies and typically, early into their professional program. The cumulative grade point average (GPA) of the foundations students is 3.04, down slightly from last year's average GPA of 3.38.

Quality of Education Students

For the second year, the RATE Project collected data on the quality of the education received by this year's education graduates. As with the data from RATE I, students who graduated from teacher education programs compare favorably with other undergraduate students. They have grade point averages above 3.0 in their education coursework, in their academic major, and in their cumulative college coursework. Table 11 presents these overall means where N refers to institutional means. It is important to note, however, that in some instances fewer than one third of the sample could report these data. It appears that cumulative GPA is the most accessible GPA data for the research representatives, and GPA in major and GPA in education are not as easily obtained.

Table 11
Mean Grade Point Averages (GPA) of Education Students

	Elementary Students		Secondary Students	
GPAs	**N**	**X**	**N**	**X**
Cululative GPA	48	3.1	52	3.1
GPA in Academic Major	10	3.3	28	3.1
GPA in Education Courses	13	3.4	27	3.4

Source: 1987 RATE Project Institutional Survey

In contrast to the data from the first year of the project wherein the data on high school rank was the most commonly available measure, in this year's survey 13 institutions provided data on elementary education preservice teachers and 12 institutions provided data on secondary education preservice teachers. Table 12 presents the average of the institutional mean scores reported on Scholastic Aptitude Test (SAT) and the American College Test (ACT). These data, while limited even before averaging aggregate scores, suggest that those education students where test scores were reported compare favorably with the mean test scores for college students generally. The SAT scores reported for elementary education preservice teachers are 471 (verbal) and 471 (math), and for secondary education preservice teachers, 478 (verbal) and 486 (math).

Table 12
Quality Indicators of Education Students

	Elementary Students		Secondary Students	
	N	X	N	X
High School Rank	13	70.7	12	74.2
ACT Verbal	21	19.8	21	20.0
ACT Math	26	17.7	26	19.6
SAT Verbal	17	471.0	21	478.0
SAT Math	17	471.0	21	486.0

Source: 1987 RATE Project Institutional Survey

Students report that they spent an average of 17 hours per week on out-of-class activities related to school work for the program, and 6 hours per week for the foundations course in which they were enrolled. They spent 11 hours per week in paid employment (down from last year's 17-hour paid work week). More Stratum Two students worked for pay and spent more out-of-class worktime related to their studies than in other strata.

Students were asked whether interactions with different sociocultural groups on campus contributed to their understandings of social foundations. They viewed these experiences, to the extent they occurred, as not very helpful. Fifty-four percent of the students report little or no contribution in this regard, 32 percent a moderate contribution, and only 18 percent a high contribution.

It should also be noted here that only about half of the students report studying a language other than English, about the same as last year's response. The percentage of students reporting second language fluency is miniscule: 2.3 percent Spanish and 1.2 percent German.

With regard to faculty access, students last year reported that faculty were often or nearly always available (79% of the time), with only slight variations between strata: 83 percent, 81 percent, and 74 percent, respectively. Approximately the same distribution--85 percent, 78 percent, and 71 percent respectively--is reflected this year in terms of students' perceptions of faculty availability.

Summary

To summarize the student survey data, five profiles were developed of foundations course students. These profiles or patterns are: common demography, traditional studenting, limited horizons, altruism, and cultural insularity.

Common Demography. The demographic attributes of students suggest a portrait of the preservice student as White and female, from a rural (small town) or suburban home community. She is matriculating in a school, college or department of education whose $5,500 tuition is financed by family savings, loans and work. She travels less than 100 miles away from home to go to college. This profile reiterates the profile of a "typical" college student drawn by RATE I.

Traditional Studenting. The profile of the students, beyond the demographic data referenced above, suggests a student who has selected an institution not for its reputation but for its proximity to home and because it is accessible and affordable. Education students matriculate in their programs at a fairly continuous rate, and 80 percent plan to take a teaching position when they finish. They are busy. The students report spending slightly fewer than 20 hours weekly in out-of-class school work and more than 12 hours weekly in paid employment. This population of teacher candidates suggests a high retention in the profession as well, in that 63 percent expect to stay in the profession at least 5 years.

Limited Horizons. The students appear to have somewhat limited views of their teaching careers. Most plan to stay close to their institutions or to their home town--and certainly within the state--for their first teaching position. Students also prefer to teach normal ability or gifted students and have little interest in special education instruction. Students prefer to teach middle-income students. Although they did not oppose placement in culturally diverse schools, they expressed little interest in this.

Altruism. These students are very eager to enter the teaching profession, having selected this career as one which would allow them to help children grow and learn. They are willing to pursue a teaching career while acknowledging that, although a teacher's salary is adequate to support a single person, it is inadequate for supporting a family.

Cultural Insularity. The student respondents are predominantly White, with fewer than 5 percent Black and two percent Hispanic in the sample. This contrasts sharply with the pupil profile in the nation's major metropolitan school

districts. The students, who have not ventured far to attend college, generally want to return to the small towns and rural communities in which they grew up. Only half of the student population reports any knowledge of a second language, and fluency is exhibited by a very few. This cultural insularity is aggravated as well by limited opportunities, perhaps more accurately described as selected experiences, in the university setting to explore cultural diversity.

Highlights of RATE II

This second year of data collection allows one to compare institutions, teacher education programs, and teacher educators. Although the longitudinal benefits of this study will only be realized fully in years to come, a wealth of timely data that are informative today have been generated. The following represent some of the highlights of the findings.

Some Encouraging Findings

•A substantial proportion of the total enrollments in institutions of higher education are education students. Education enrollments appear to have increased over the two rounds of data collection (1986 to 1987). Both of these conditions could be used to argue for increasing the level of support available for teacher education.

•A majority of those institutions surveyed report some degree of involvement in efforts to upgrade their teacher preparation programs. Their efforts include raising admissions standards and implementing more rigorous exit standards as well as engaging in a variety of curriculum revisions.

•Efforts to improve the curriculum and pedagogical activities within teacher education programs extend to implementing changes in the liberal arts curriculum for prospective teachers. Again, a majority of institutions have been engaged in some form of curriculum review and modification.

•A sizable minority of institutions, and in the case of Stratum Three institutions, a majority, have developed formal partnerships with local schools in an effort to improve both the education of beginning teachers and the context in which experienced teachers work.

•More than two-thirds of students enrolled in undergraduate programs are enrolled full time, a condition which allows student to move more easily through developmentally sequenced programs in such arrangements as student cohort groups.

•Almost half of the reporting institutions indicate that they have available scholarships and special loans to attract both high quality and culturally diverse teaching candidates (although only about 1 in 7 institutions reports that it has instituted a recruitment program as such).

•The overwhelming majority of faculty and students give positive ratings of the quality of their programs and foundations courses. Education courses examined in the first two years of data collection generally are viewed as being as rigorous as or more rigorous than non-education courses. It should be noted, however, that these are self-reported perceptions and the criteria for which these judgments are based are unclear.

•The curricula in the arts, sciences, and humanities and in educational foundations were generally perceived to be both of high quality and of considerable importance by faculty and students, contrary to pervasive concerns expressed about their nature and quality in a variety of forums.

•Students are more positive about a career in teaching than when they began their studies and the great majority project a career in teaching of a least 5 years.

•Approximately 80 percent of the faculty who teach foundations courses in all types of institutions have earned a doctorate. The majority of them have a Ph.D. or a research degree.

•As was the situation with the secondary methods professors surveyed last year, those faculty teaching foundations appear to exemplify some diversity in their instruction. Lecture and discussion, however, remain the staples of instruction. The appropriateness and effectiveness of the methods employed can, at best, be inferred from the positive ratings students give these courses.

Some Concerns To Be Addressed

•While a general concern is expressed by respondents in this sample about the difficulty of acquiring both a high-quality liberal arts education and professional teacher preparation within four years, only one in seven institutions have extended their programs in some way (however, almost 40 percent of Strata Two and Three institutions have implemented alternative programs for liberal arts graduates).

•Despite the number of students who perceive their teacher education programs to have afforded them a quality education, some students report concerns about their ability--or inability--to become teachers.

•Many faculty and students express major reservations about students' ability to effectively teach culturally diverse and at-risk students. In fact, a limited number of these prospective teachers chose as a first priority to instruct such students.

•Students' ability to employ a second language in their teaching is lacking. Fewer than 3 percent of students are fluent in a second language. Likewise, students have little competence in using computers as a teaching aid, although computer technology is commonplace in society.

•It appears that foundations of education study gives short shrift to several core disciplines such as history, economics, and political science. In several institutions, the foundations program does not include study in philosophy, history, and sociology. Foundations courses are frequently taught by faculty whose graduate academic training is in areas other than those core disciplines typically represented by foundations courses.

•Foundations course faculty, who are typically White, middle-aged men, collectively reflect major limitations in terms of their cultural diversity, especially when contrasted with a globally diverse society. Nine of 10 faculty are White. Almost three-fourths are males. They are disproportionately middle-aged. Only 28 percent of the foundations course professors are women, and of these, only 19 percent are full professors. Students enrolled in the foundations courses, just as the faculty, represent a basically white, English-speaking population. They differ in that they are predominantly females who come from rural communities.

•Foundations course faculty vary considerably in terms of the number of scholarly publications they have contributed to the literature. More than half of the faculty in Strata One and Two institutions have never published. While a considerable percentage of faculty (41 percent in Stratum Three institutions) have published 10 or more articles, the majority have published fewer articles than this over their lifetimes.

•Fewer than half of the students surveyed report that they regularly engage in library research and more than a third indicate that they rarely, if ever, review research or engage in library activity as part of their foundations course study.

•Students tend to attend colleges that are in relatively close proximity to their homes (certainly cost is a factor for many of these prospective teachers). They have limited engagement with culturally different students in their campus life. Most want to teach in their home areas or in similar areas and to teach students who are like themselves. Multiple indications of cultural insularity can be inferred from these data.

•Students are not overtly concerned about working conditions in schools. The majority report that they are attracted by present conditions in schools and do not find the salary inadequate for supporting a family.

Conclusion

While the data reflect several concerns, many other facts and perceptions presented in this report and contained in the data portray teacher education as a viable and vital part of the education enterprise. These data were not collected, however, with any preconceived notion about what they would show. Rather, the RATE Project is a long-term venture to establish a reliable data base for analyzing trends in teacher education, thereby providing essential information for intelligent decision-making. The third round of data collection and analysis, with a focus on elementary education faculty and students, is underway.

APPENDIX A
Participating Institutions in 1987 RATE Survey

In Alphabetical Order

Alabama State University
Montgomery, AL

Anderson College
Anderson, IN

Augusta College
Augusta, GA

Augustana College
Rock Island, IL

Baylor University
Waco, TX

Bellarmine College
Louisville, KY

Belmont College
Nashville, TN

Boston College
Chestnut Hill, MA

California State College
Bakersfield, CA

Canisius College
Buffalo, NY

Chaminade University of Honolulu
Honolulu, HI

College of William & Mary
Williamsburg, VA

Concordia College
River Forest, IL

Concordia College of Wisconsin
Mequon, WI

Drake University
Des Moines, IA

Eastern Kentucky University
Richmond, KY

Francis Marion College
Florence, SC

George Mason University
Fairfax, VA

George Washington University
Washington, DC

Georgia Southern College
Statesboro, GA

Georgian Court College
Lakewood, NJ

Governors State University
University Park, IL

Graceland College
Lamoni, IA

Grand Canyon College
Phoenix, AZ

Hope College
Holland, MI

Idaho State University
Pocatello, ID

Illinois State University
Normal, IL

Indiana University
Bloomington, IN

Indiana University of Pennsylvania
Indiana, PA

Kansas State University
Manhattan, KS

Kean College of New Jersey
Union, NJ

Lock Haven University
Lock Haven, PA

Luther College
Decorah, IA

Marymount University
Arlington, VA

Milligan College
Milligan College, TN

Mississippi State University
State College, MS

Mobile College
Mobile, AL

Monmouth College
West Long Branch, NJ

Moorhead State University
Moorhead, MN

Newberry College
Newberry, SC

Niagara University
Niagara, NY

Nicholls State University
Thibodaux, LA

Northern Illinois University
Dekalb, IL

Northern State College
Aberdeen, SD

Oakland City College
Oakland City, IN

Ohio Dominican College
Columbus, OH

Ohio Northern University
Ada, OH

Oklahoma State University
Stillwater, OK

SUNY-Plattsburgh
Plattsburgh, NY

Shippensburg University
Shippensburg, PA

Slippery Rock University
Slippery Rock, PA

Southern Illinois University
Carbondale, IL

Sterling College
Sterling, KS

Taylor University
Upland, IN

University of Akron
Akron, OH

University of Delaware
Newark, DE

University of Georgia
Athens, GA

University of Hawaii at Manoa
Honolulu, HI

University of Kentucky
Lexington, KY

University of Maine at Farmington
Farmington, ME

University of Miami
Coral Gables, FL

University of Missouri-Kansas City
Kansas City, MO

University of Montevallo
Montevallo, AL

University of New Orleans
New Orleans, LA

University of North Carolina-Charlotte
Charlotte, NC

University of North Florida
Jacksonville, FL

University of Pittsburgh
Pittsburgh, PA

University of Science and Arts
Chickasha, OK

University of Tennessee
Knoxville, TN

University of Vermont
Burlington, VT

University of Wisconsin-Parkside
Kenosha, WI

Valparaiso University
Valparaiso, IN

Washington State University
Pullman, WA

West Virginia Institute of Technology
Montgomery, WV

West Virginia University
Morgantown, WV

Western Kentucky University
Bowling Green, KY

Wichita State University
Wichita, KS

William Jewell College
Liberty, MO

William Penn College
Oskaloosa, IA

Appendix B

Confidence Levels for Data by Type and Strata

Inference About	N	n	Error at the 95% Means (S.D.'s)	Confidence Level Proportions (Assumes p = .5)
INSTITUTIONS				
Total	713	77	.22	.11
Stratum 1	232	23	.38	.19
Stratum 2	318	25	.38	.19
Stratum 3	163	29	.32	.17
PROFESSORS				
Total		153	.16	.08
Stratum 1		43	.30	.15
Stratum 2		49	.28	.14
Stratum 3		61	.25	.125
STUDENTS				
Total		715	.07	.036
Stratum 1		189	.14	.071
Stratum 2		218	.13	.066
Stratum 3		308	.11	.056